

ABSTRACT

Composite material and use thereof for controlling thermal effects in a physicochemical process

The invention relates to a composite material, a method for controlling the thermal effects generated in a physicochemical process using said material, and applications of the material and the method.

The composite material comprises an active solid and a phase change material. The phase change material takes the form of micronodules having an average size of between 1 micron and 5 millimeters and it is selected from materials with a liquid/solid phase change temperature of between -150°C and 900°C . The active solid is selected from solids that can be used in a method involving reversible physicochemical processes that are exothermic in one direction and endothermic in the opposite direction.